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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------|---------------|----------------------|-------------------------|------------------|
| 10/624,507 | 07/23/2003 | Keith Baker | T01073-0006-US | 7404 |
| 75 | 90 09/12/2005 | | EXAMINER | |
| McCarthy Tetrault, LLP | | | SORRELL, ERON J | |
| Box 48 | | | APTIBUT | DARED MUMADER |
| Suite 4700 | | | ART UNIT | PAPER NUMBER |
| 66 Wellington St. W. | | | 2182 | |
| Toronto, ON M5K 1E6 CANADA | | | DATE MAILED: 09/12/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|---|---|--|--|--|--|--|
| Office Action Commence | 10/624,507 | BAKER ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Eron J. Sorrell | 2182 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was precised to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | | |
| _ " | action is non-final. | | | | | | |
| ,_ | | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| · | A parto Quayro, roco o.b. , r, r. | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-15</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-15</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | • | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>23 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correct | • , , | | | | | | |
| 11) The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | · . | | | | | | |
| 12) Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) |)-(d) or (f) | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | |
| 1. ☐ Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list | • | ed | | | | | |
| Coo the attached detailed Chief detail for a liet | or the continue copies her receive | | | | | | |
| | | | | | | | |
| | • | | | | | | |
| Attachment(s) | _ | · | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152) | | | | | | | |
| Paper No(s)/Mail Date <u>1/12/04</u> . 6) Other: | | | | | | | |
| | | | | | | | |

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DETAILED ACTION

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Claim Objections

1. The claims are objected to because of the following informalities: The acronyms identified in the claims should be accompanied by the full-text definitions at least at the first occurrence to the acronym. For example, the preamble of claim 1 should read, "A Data Terminal Equipment (DTE), comprising..."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1,2,9,10,11, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Pascolini (US Pub. No. 2002/0069300).
- 4. Referring to apparatus claim 1, Pascolini teaches a DTE comprising,
 - a port (see paragraph 14 on page 1);

at least one signal line connected to the port to establish

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a communication path (see item 215 in figure 2);

a set of transceivers, each associated with a respective circuit in the DTE to establish communication along the communication path in accordance with a selected protocol (see items labeled 225a-d in figure 2);

a switch in each of the signal lines, each of the switches having a set of connections with each of the connections associated with a respective one of the transceivers (see items labeled 230n and paragraph 28 on page 2); and

a control signal to condition the switches to connect all of the signal lines with a connection associated with a selected one of the transceivers (see paragraph 29 on page 2).

- 5. Referring to claim 2, Pascolini teaches the selected protocol is defined by one of a plurality of electrical interface standards (see paragraph 18 on page 2).
- 6. Referring to claims 9 and 15, Pascolini teaches an interface system for coupling a plurality of signals between a DTE and a DCE via a plurality of communication paths, said system having:

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a DTE port having at least one signal line to establish one of said plurality of communication paths, said DTE having a set of transceivers each associated with a respective circuit in said DTE to establish communication along said communication path in accordance with a selected protocol (see paragraph 8 on page 1);

a DCE port having at least one signal line to establish one of said plurality of communication paths, said DTE having an interface driver circuit to establish communication along said communication path in accordance with said selected protocol (see figure 2 and paragraphs 17 and 18 on pages 1 and 2);

a switch in each of said signal lines, each of said switches having a set of connections with each of said connections associated with a respective one of said transceivers (see paragraph 28 on page 2); and

a control signal to condition said switches to connect all of said signal lines with a connection associated with a selected one of said transceivers (see paragraph 29 on page 2).

7. Referring to claim 10, Pascolini teaches the plurality of paths includes a plurality of connector pins (see paragraph 17 bridging pages 1 and 2).

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8. Referring to claim 11, Pascolini teaches the DTE connector and DCE connector include a minimal number of predetermined connector pins, wherein said minimal number of predetermined connector pins is determined by any one of said plurality of electrical interface standards having the greatest number of signals needed for communication (see paragraphs 20-27 on page 2).

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Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 3,4,5,6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pascolini in view of <u>How Networks</u>

 <u>Work</u> by Frank J. Derfler and Les Freed (hereinafter "Derfler").
- 11. Referring to claims 3,4, and 12, Pascolini fails to teach the plurality of electrical interface standards includes, but not limited to EIA/TIA-232, EIA/TIA-449, EIA/TIA-530, EIA/TIA-

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530A and IEEE 1284 and fails to teach the port corresponds to a corresponding port of a DCE to effect communication between the DTE and DCE via the selected protocol.

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Derfler teaches, RC-232 is the most common type of communication circuit in use today and further teaches that a DTE is usually connected to a DCE (see second and third full paragraphs on page 49).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Pascolini with the above teachings of Derfler. One of ordinary skill would have been motivated to make such modification because RC-232 is well known and widely used in the art as suggested by Derfler.

- 12. Referring to claim 5, Pascolini teaches the protocol is identified by which leads are active (see paragraph 20 on page 2), these active leads are provided by the DCE.
- 13. Referring to claim 6, Pascolini teaches the interface controller provides the control signal to the switches, the control signal being dependent of the identification signal (see paragraph 29 on page 2).

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14. Claims 7,8,13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pascolini in view of Yu (U.S. Patent No. 5,081,627).

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15. Referring to claim 7,8,13, and 14, Pascolini fails to teach the system further comprising a power controller for controlling electrical power to the switches depending on whether the port is coupled to the DCE thereby reducing power consumption by the DTE and Pascolini fails to teach a power controller enabling the DCE coupled to the port after the selected protocol has been determined.

Yu teaches, in an analogous system, the above limitations (see paragraph bridging columns 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Pascolini with the above teachings of Yu. One of ordinary skill in the art would have been motivated to make such modification so the DCE would not require a its own power supply, thereby reducing the cost of the system.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following

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references are cited to further show the state of the art as it pertains to multi-functional ports:

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U.S. Patent No. 6,072,803 to Allmond et al. teaches an automatic protocol detection system; and

U.S. Patent No. 5,497,460 to Bailey et al. teaches a system and method for detecting network connectivity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J. Sorrell whose telephone number is 571 272-4160. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4083. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EJS September 1, 2005

KIM HUYNH
PRIMARY EXAMINED

9/1/05